

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

<b>In the Matter of</b>	)	
	)	
<b>AMENDMENT OF PART 97 OF THE</b>	)	<b>WT Docket No. 04-140</b>
<b>COMMISSION'S RULES GOVERNING</b>	)	
<b>THE AMATEUR RADIO SERVICE</b>	)	

**To: The Commission**

**COMMENTS OF ARRL, THE NATIONAL ASSOCIATION  
FOR AMATEUR RADIO**

ARRL, the National Association for Amateur Radio, also known as the American Radio Relay League, Incorporated (ARRL), by counsel, hereby respectfully submits its comments in response to the *Notice of Proposed Rule Making and Order* (the Notice), FCC 04-79, released April 15, 2004. The Notice specifies a comment date of June 15, 2004. Therefore, these comments are timely filed. The Notice proposes to address numerous, principally unrelated petitions for rulemaking which propose changes in operating privileges in the Amateur Radio Service. As well, the Notice addresses certain rules that are obsolete and duplicative. Finally, the Notice proposes, on the Commission's own motion, certain conforming Part 97 rule changes which are necessitated by changes to the international Radio Regulations, or by changes in Commission organization and practice. For its comments on the proposals in the Notice, ARRL states as follows:

**I. Introduction**

1. The Notice in this proceeding is most welcome. It has been several years since the Commission last visited operating rules in the Amateur Service, and some of the petitions addressed in this Notice are very old indeed. As an example, RM-10313, filed by Kenwood Communications Corporation on May 1, 2001, dealing with Auxiliary

operation in the Amateur Service, is now three years old. While the incremental changes in operating privileges and rules are certainly not profound, this proceeding is likely not to be finally resolved for some months after the comment dates in this proceeding, and by that time, the oldest petitions considered in this proceeding will have been on the table for between three and four years. ARRL is constrained to suggest that this timetable is not sufficiently responsive to the needs and interests of a radio service of substantial size and benefit to the public, but which neither requires nor receives a significant portion of the Wireless Bureau's resources. It is hoped that other petitions filed subsequent to those addressed in the instant Notice and which are pending before the Wireless Telecommunications Bureau can be more expeditiously addressed.

2. That being said, the instant Notice is well-considered and in the main, ARRL is in agreement with the Notice proposals and with the Commission's treatment of the issues raised by the petitions therein considered. ARRL will have no comment on the petitions dismissed by the Order portion of the document. Rather, these comments will address only the affirmative proposals set forth in the Notice. This should not necessarily be interpreted as ARRL's agreement that the dismissed petitions were without merit or that they should have been dismissed. However, ARRL's view is that the Commission has declined to propose the rule changes proposed in them and it is the prerogative of the petitioner to seek further review of the decision, or to accept its disposition. Finally as an initial matter, ARRL is most appreciative of the Commission's sensitivity to the burdens that face both manufacturers and Amateur Radio licensees in proposing (at paragraph 85 of the Notice) to relieve restrictions on the use of radio frequency (RF) power amplifiers between 24 and 35 MHz. These proposals are helpful, and reduce the burdens that were,

many years ago, unfairly placed on innocent Amateur Radio licensees due to enforcement problems in the Citizen's Radio Service in Dockets 21116 and 21117 [*Amendment of Parts 2 and 97*, 67 FCC 2d 939 (1978)].

3. At paragraph 5 of the Notice, the Commission discusses the 1999 *License Restructure Report and Order* in Docket 98-143, 15 FCC Rcd. 315 (1999) which changed in some respects the Amateur Service operator license structure and examination system. It notes correctly that the 98-143 proceeding declined to consider a comprehensive restructuring of operating privileges, suggesting instead that the Amateur Service Community should have an opportunity to weigh in on revisions of operating privileges before the Commission considers a comprehensive restructuring of such. The Commission then states that, on the basis of the petitions before it, it concludes "that a comprehensive restructuring of operating privileges is now ripe for consideration." While ARRL agrees with this conclusion, it is urgent to note that this proceeding does not constitute a comprehensive restructuring of operating privileges. It is, instead, an incremental series of largely unrelated changes in operating privileges that are necessary and useful.

4. As a followup to the Commission's 1999 *License Restructure Report and Order*, ARRL carefully considered, and in January, 2004 filed, a proposal for a comprehensive restructuring of both license requirements and operating privileges. That petition, RM-10867, proposes the creation of a new entry-level Amateur Radio license that would include High Frequency (HF) privileges without requiring a Morse code test. The Petition also proposed consolidating all current licensees into three classes, retaining

the Element 1 (5 WPM) telegraphy requirement only for the highest class.<sup>1</sup> The overall proposed ARRL license restructuring plan in RM-10867 would incorporate the "Novice refarming" plan that ARRL proposed in RM-10413, which the Commission proposes to adopt at paragraphs 7 through 11 of the instant Notice. However, it is RM-10867 (and related petitions filed by other parties that are now pending) and not the instant proceeding, that constitutes a comprehensive restructuring of license requirements and operating privileges. Given the timing of the filing of RM-10867, which was determined by necessary changes in the international Radio Regulations adopted at the 2003 World Radiocommunication Conference (WRC-03) at Geneva, Switzerland, it is right and proper that the Commission should consider that petition in a subsequent proceeding and not this one. However, it is necessary that the Commission not view the instant proceeding as a comprehensive revision of licensing and operating privileges. The instant proceeding is an important one, in the nature of a biennial review of *mesne* rules changes, and a helpful preface to consideration of the necessary and urgent comprehensive license restructuring proceeding which ARRL hopes the Commission will commence later this year, based on RM-10867.

## **II. High Frequency Privileges**

5. At paragraphs 7 through 11 of the Notice, the Commission proposes to adopt the ARRL proposal to dissolve the Novice and Technician Class High Frequency (HF) subbands, and to "refarm" those segments to relieve serious congestion in other portions

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<sup>1</sup> RM-10867 proposes a new entry-level license class that would require a 25-question written exam. It would offer limited HF telegraphy, data, telephony and image privileges in the 80, 40, 15 and 10 meter amateur bands, plus certain VHF and UHF privileges. The ARRL plan also would consolidate Technician, Technician Plus (Technician with Element 1 credit) and General class licensees into a new General Class license that no longer would require a telegraphy examination. Current Technician and Technician Plus license holders automatically would gain current General class privileges without additional testing. Applicants for an Amateur Extra Class license would still have to pass a 5 WPM telegraphy examination, but the General and Extra Class written examinations would stay the same.

of the same HF Amateur allocations.<sup>2</sup> The ARRL proposal was carefully researched, and was the subject of a specific survey of both ARRL members and non-members on the subject of HF operating privileges. While consensus was not possible on the many specifics of any “refarming” plan, there was clear consensus on the need to dissolve the Novice and Technician Plus subbands, which were underutilized relative to the remainder of the bands in which those subbands were allocated. ARRL’s proposal for elimination of the subbands; for the expansion of the segments in which residual Novice and Technician Plus class licensees can operate telegraphy (to include narrowband segments of the 80, 40, 15 and 10 meter bands); and for relief of restrictions in the telephony and telegraphy/data subbands, will benefit all licensees. While certain configurations might be more popular than that specified in the ARRL petition and in the Notice proposal, ARRL’s survey in general lends support to the Notice proposal. The desire for more telephony spectrum in each of those bands should be, and was, carefully balanced against the important goal of encouraging further development of narrowband data communications in the telegraphy segments of those bands. ARRL is of the view that the proposed configuration reaches the right balance, and is gratified that the Commission is in agreement.

6. The extensive interest on the part of licensed Amateurs in the specifics of this proposal was surprising to ARRL as well as to the Commission. The survey results were impressively broad, and the more than 120 comments filed with the Commission on this topic in response to the ARRL Petition, RM-10413, indicates both substantial interest and

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<sup>2</sup> ARRL notes what it believes are minor typographical errors in the Commission’s proposed Appendix, at page 53 of the Notice, since the Commission’s statement is that it intends to adopt the ARRL refarming proposal. First, relative to Section 97.301(c), in all three ITU regions, the 80 meter allocation should be 3.525-3.750 MHz, not 3.525-3.725 MHz; in Section 301(d); in ITU Regions 1 and 3, the 40 meter allocation, for the moment, should read 7.025-7.100 MHz, not 7.025-7.125 MHz.

the need for some reform, as proposed. The changes proposed in the Notice are necessary and will inevitably lead to increased spectrum efficiency in the overcrowded Amateur HF allocations. ARRL urges that the Commission proceed with this proposed change quickly. With the decline of the current eleven-year sunspot cycle, there is inevitably a greater emphasis on the substantially overcrowded 80 meter and 40 meter bands, which provide more reliable long-distance propagation during low sunspot cycle minima. The proposed changes will assist greatly in redistribution of some of this overcrowding. Finally, the ARRL refarming proposal incorporated in the Notice will not entail any loss of access to spectrum for any licensee, and General, Advanced and Extra Class licensees will gain spectrum for telephony emissions, the most popular operating mode on the HF bands.

### **III. Expanded Authorization of HF Emission Types**

7. At paragraphs 15 and 16 of the Notice, the Commission addresses a petition filed by Mr. Mark Miller, requesting that the Commission amend Section 97.305(c) of the rules to allow an Amateur station to transmit an image emission that occupies a bandwidth of 500 Hz or less on the HF segments now authorized for data and RTTY emission types. The reason for the change is to permit the use of digital technologies that combine image and data communications in the HF bands. Section 97.3 (c) currently defines data as follows:

(2) Data. Telemetry, telecommand and computer communications emissions having designators with A, C, D, F, G, H, J or R as the first symbol; 1 as the second symbol; D as the third symbol; and emission J2D. Only a digital code of a type specifically authorized in this part may be transmitted.

Appendix A of the Notice proposed the following modification to § 97.3 (c):

(2) Data. Telemetry, telecommand and computer communications emissions having designators with A, C, D, F, G, H, J or R as the first symbol; 1 as the second symbol; D as the third symbol; emissions A1C and F2C having an occupied bandwidth of 500 Hz or less, and J2D. Only a digital code of a type specifically authorized in this part may be transmitted.

In his comments filed in connection with his petition, petitioner Miller stated in part as follows:

The proposed change to 97.3(c) (2) should read: Data. Telemetry, telecommand and computer communications emissions having designators with A, C, D, F, G, H, J or R as the first symbol; 1 as the second symbol; D as the third symbol; emissions A1C, F2C and J2C having an occupied bandwidth of 500 Hz or less, and J2D. Only a digital code of a type specifically authorized in this part may be transmitted.

Mr. Victor Poor, in his comments in this proceeding, noted that the current rules specify a limitation of 300 symbols per second (except that 1200 symbol/s are permitted in the 10 meter band) rather than a bandwidth limitation of 500 Hz. ARRL notes that the only provision of Part 97 specifying a bandwidth limitation of 500 Hz is § 97.221(c)(2) pertaining to automatically controlled digital stations.

In his reply comments, Mr. Miller amended his proposed wording of 97.3(c)(2) to suggest the following:

Data. Telemetry, telecommand and computer communications emissions having designators with A, C, D, F, G, H, J or R as the first symbol; 1 as the second symbol; D as the third symbol; emissions A1C, F2C, J2C and J3C having an occupied bandwidth of 500 Hz or less, and J2D. Only a digital code of a type specifically authorized in this part may be transmitted.

Mr. Miller stated as follows:

Mr. Poor objects to the limitation of image emissions with a bandwidth of 500 Hz or less. The purpose of enumerating a bandwidth is to preserve the intention of emissions segregation which is to relegate the transmission of certain inharmonious emission types to different segments of the frequency bands...

ARRL agrees with Mr. Miller's basic idea of permitting images to be transmitted in HF segments where data emissions are currently allowed in Part 97 of the rules. Amateur stations have transmitted images via RTTY and data since these modes were introduced, an early example being "Teletype art." The term "computer communications" appears to be broad enough to encompass images, as they are common exchanges between computers. Nevertheless, there have been a number of amateur operators who have queried ARRL and the Commission about the permissibility of sending images using RTTY and data emissions. Those enquirers would like to see a definitive clarification, preferably in the rules. The question, however, is how best to accomplish it.

8. The third symbol of the emission designator for "data" should remain as "D" rather than including the letter "C" (meaning Facsimile) in this position. The easiest "fix" for this problem is to amend 97.3(c)(2) to read as follows:

Data. Telemetry, telecommand and computer communications emissions including images having designators with A, C, D, F, G, H, J or R as the first symbol; 1 as the second symbol; D as the third symbol; and emission J2D. Only a digital code of a type specifically authorized in this part may be transmitted.

This version would have the effect of permitting digital images to be transmitted in a computer communication within the existing symbol rates, which are given in §97.307(f). It would not include analog images, as analog emissions would be inhomogeneous with the digital emissions in the segments where CW, RTTY and data emissions are permitted. Therefore, ARRL agrees with the Commission that revising the definition of data emission types in Section 97.3(c) to include image emission types currently being used is the proper approach to Mr. Miller's concern. However, rather than imposing a specific bandwidth limitation in the definitions section of the Rules which constitutes an unnecessary limitation, ARRL would urge that the definition immediately above should



be adopted instead. It is submitted that this will achieve better the Commission's stated goal at paragraph 16 of the Notice to permit greater flexibility in digital communication experimentation and development while protecting the integrity of the narrow bandwidth nature of the data emission band segments. Finally, if a fixed bandwidth of 500 Hz were specified in the definition of Data, that bandwidth would be applicable even in bands where a higher symbol rate or bandwidth is permitted. If 500 Hz were to stand, on frequencies where there is a higher limit or no specific limit for data communications, the sending station would have to slow its communications to a speed that could be accommodated within a bandwidth of 500 Hz. This is obviously an unintended consequence.

9. Finally, it may be premature to adopt any final plan with respect to this matter in the instant proceeding. ARRL conducted a detailed study of the desirability of regulation of on-air emission types in all Amateur allocations by bandwidth rather than mode of emission, which was mentioned in the comments of Mr. Poor. ARRL is preparing and intends to submit in the near term a Petition incorporating this approach. That petition will propose a comprehensive change in the Rules, with the intention of greatly simplifying the rules, eliminating incremental rule changes to accommodate new emission types, and to encourage digital communications experimentation and refinement.

#### **IV. Expanded Auxiliary Operation**

10. At paragraphs 17 through 22 of the Notice, the Commission considers a petition by Kenwood Communications Corporation, RM-10313, which seeks to permit Amateur Radio licensees to use the 2-meter band, except the 144.0-144.5 MHz and

145.8-146.0 MHz segments (which are used for weak-signal terrestrial and satellite communications, respectively) for auxiliary operation. This authority would provide Amateurs with substantial flexibility to utilize remote control (telecommand) facilities, consistent with other uses of this extremely popular band. Presently, auxiliary operation is confined to the Amateur bands above 222 MHz, with some exclusions.

11. The technology used in remotely controlling Amateur stations has become more refined in recent years. These developments have been rapid, and provide, for some, innovative solutions to burdensome antenna regulations, increased time spent in vehicles commuting, and in connection with emergency communications systems and operational planning. Kenwood has developed a popular configuration of a means of remotely controlling an HF station, and there are others. While there is a reasonable concern about the use of a heavily used Amateur allocation for auxiliary operation, there is good reason now to permit increased flexibility in auxiliary operation as proposed. There is careful planning in the deployment of the 2-meter band through sophisticated, albeit volunteer, local and regional frequency coordination, and there are opportunities for auxiliary operation in this band. Because of the protection afforded weak-signal, satellite, beacon, and other fixed operation in the 2 meter band, ARRL is convinced that this proposal is timely and should be adopted. It will enhance the development of sophisticated Amateur communications systems, and will help address modern difficulties in HF and other station configurations.

## **V. Spread Spectrum Communications at VHF**

12. The Notice, at paragraph 23 through 25, in response to an additional request in ARRL's RM-10413 Petition, proposes to permit Spread Spectrum (SS) emissions in the

222-225 MHz band. Presently the rules prohibit SS emissions below 420 MHz. The purpose of the ARRL request was to add a VHF allocation to those in which SS emissions could be used for experimentation. Since Section 97.311(b) makes all SS operation secondary to other authorized emissions, this would not compromise other Amateur operations in the 222-225 MHz band. ARRL continues to support the proposal and asks that the Commission proceed with it as proposed in the Notice.

13. However, the Notice also requests comment on whether to permit SS in the 2 meter and 6 meter bands as well. ARRL suggests that the Commission not take that additional step. The 6-meter Amateur band is used extensively for weak-signal communications over long propagation paths, and is increasingly used by all classes of amateur licensee except Novices. ARRL would be cautious in the use of SS in the 6-meter band, due to concerns about raising the noise floor in that band, which is a potential aggregate effect of SS transmissions. Furthermore, the request to permit SS at 222-225 MHz was premised on the availability of that band for additional amateur uses. The 6 and especially the 2-meter band are substantially deployed with narrowband communications, and there are fewer opportunities for frequency reuse in those allocations.

## **VI. Retransmission of Space Station Communications**

14. At paragraphs 35 and 36 of the Notice, the Commission addresses the petition of the John H. Glenn Research Center Amateur Radio Club to amend Section 97.113(e) of the Rules to permit retransmission of Government communications between the Earth and the International Space Station on amateur bands. ARRL supports this proposal, and the Commission's analysis of the matter is accurate in all respects.

15. In essence, this is resolution of a technicality. In 1993, the Commission noted the intense interest of Amateur Radio operators in space exploration. Finding this interest to be a favorable adjunct to the educational pursuits in Amateur Radio, the Commission relaxed its general prohibition of retransmission of the communications of other radio services via Amateur Radio, so as to permit the retransmission of Space Shuttle-to-Earth and Earth-to-Space Shuttle communications on government frequencies.<sup>3</sup> This has worked well, and ARRL is unaware of any allegations of abuse of the privilege by radio amateurs. Amateur repeaters have from time to time retransmitted NASA communications between NASA ground stations and the Space Shuttles. Because the Shuttle flights typically themselves carried Amateur Radio experiments, called SAREX (Shuttle Amateur Radio Experiment), there was heightened interest in the non-Amateur communications between the Shuttles and NASA ground stations. However, Section 97.113(e) refers to Space Shuttles specifically and it is therefore not capable of a broader interpretation. Literally read, the rule would prohibit Amateur retransmission of communications between NASA ground stations and the International Space Station (ISS) which is not a Space Shuttle. Space Shuttle flights are not prevalent as they once were, but the ISS has replaced the Shuttles as objects of interest and study by radio amateurs. There is not a significant distinction to be made between the Shuttle retransmissions of non-Amateur communications and ISS retransmissions of such communications, except that the ISS is permanent and the Shuttle flights were transitory. The latter, by definition, are time-limited, and so enforcement of the portion of Section 97.113(e) which permits retransmission of propagation, weather forecasts, and shuttle

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<sup>3</sup> See, *Amendment of Part 97 of the Commission's Rules to Relax Restrictions on the Scope of Permissible Communications in the Amateur Service*, 8 FCC Rcd. 5072 (1993).

retransmissions “not...on a regular basis, but only occasionally, as an incident of normal amateur radio communications” is unnecessary. The ISS, being permanent, does not have that same self-limiting factor. Nevertheless, since there is no reason to believe that licensed amateurs will abuse this privilege, it not having been abused heretofore in the eleven years the rule has been in effect, there is no good reason, as the Commission tentatively concludes, to believe that ISS retransmission authority will be abused. Therefore, ARRL requests that the Commission adopt this proposal. The Commission’s appendix, referring to manned spacecraft retransmissions, reads well and is neither overinclusive nor underinclusive. Since prior approval from NASA is and has been required for any such retransmission, this proposal will work well to continue to foster interest in the United States space program.

## **VII. Vanity Call Sign System; In Memoriam Designations**

16. At paragraphs 48 through 52, the Commission proposes to adopt a plan of the Quarter Century Wireless Association (QCWA) filed October 26, 2001 in RM-10353, which would allow holders of Vanity Call Signs to designate a specific amateur radio club to acquire their call sign *in memoriam*. The current rules, at Section 97.19(c)(3), permit certain specified relatives of a deceased holder of a call sign to consent to the assignment (by the Commission) of that call sign to a subsequent recipient after the death of the holder of the call sign but before the call sign is returned to the pool for reassignment, within two years of the death of the holder. The holder, however, does not under the rules have the authority to designate, *ante mortem*, a *post mortem* recipient of that call sign. The Commission notes some support for QCWA’s proposal.

17. ARRL is constrained to oppose this petition on conceptual grounds. What this proposal would do, in effect, is to make a Commission-assigned call sign a chattel, or property right, which is a quality that ARRL does not believe a vanity call sign, or any Commission-issued call sign, has. The QCWA proposal, if adopted, would mean that vanity call signs would be subject to being assigned by means of a statement of testamentary intent in a Will, for example.<sup>4</sup> The QCWA proposal is not merely the extension of the family consent provision of Section 97.19(c)(3). That provision was intended for a specific and limited purpose: to insure that a vanity call sign, which is normally unavailable for two years following the death of the holder, could be in that increment of time, acquired by a family member. If the family of the decedent agrees, the Commission could assign the call sign to a club trustee. Nothing in that provision, which under certain circumstances accelerates the availability of the call sign for Commission reassignment, creates any implication that a call sign is property of the holder, or a chattel to be assignable (or made unavailable to a family member or at a later date to a subsequent holder) by the holder.<sup>5</sup> Vanity Call Signs are not assignable and the Commission's Rules do not permit trafficking in call signs. They are no more a property right of the holder than the Amateur license that they signify. To permit the creation of a

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<sup>4</sup> It is unclear what type of testamentary documentation would suffice for Commission purposes, or whether the creation of such a document would, under State law, necessitate the filing of the document in probate proceedings. In many jurisdictions, any document that constitutes a testamentary instrument would have to be filed in the decedent's estate probate proceeding. It is also unclear whether the creation of such a testamentary document, if created after a Will, or prior to the final Will or Codicil to a Will, would invalidate a prior Will or raise questions about the testator's intent. The Commission should not create a procedure that encourages the creation of ad hoc testamentary documents which might have profound, unintended effects on the probate of a decedent's estate.

<sup>5</sup> Notably absent from the list of relatives of a decedent who may consent to the early application of a club trustee for a vanity call sign held by a decedent is the decedent's executor/executrix or the personal representative of the decedent's estate. This is a clear indication that the Commission was not, in enacting Section 97.19(c)(3) attempting to create any property right in a call sign. Rather, it was attempting to allow a family member who may be a radio amateur an opportunity to obtain from the Commission an assignment of that call sign.

testamentary provision whereby a call sign can be intentionally “retired” by the holder by his or her own actions, potentially in perpetuity, is neither fair to others who may wish to request it, nor consistent with the nature of the call sign itself, which is assigned by the Commission for use by a holder, not for his or her ownership. Given the foregoing, ARRL requests that the QCWA proposal not be adopted, and no change to Section 97.19(c)(3) be enacted in this proceeding.

### **VIII. Vanity Call Sign System; Multiple Applications**

18. The Notice, at paragraphs 52 through 54, proposes to adopt a limitation on the number of applications that a single licensee can file for the same call sign. This proposal (if amended slightly) would stem abuses of the system, since multiple applications for the same vanity call sign received by the Commission on the same day are chosen by lottery. So, if an applicant wishes to maximize his or her chances of obtaining a particular desirable call sign that is available on a particular day, he or she can file dozens of applications (and pay the fees for those applications) on that same day, seeking that single call sign. If one application is selected (or even if the application for that call sign filed by another applicant is selected), the multiple-filing applicant can apply for a return of all fees paid except that fee for the application actually granted. This is because the fee is not an application fee but a regulatory fee for the use of a particular call sign. So, if an applicant files dozens of applications, each specifying a single vanity call sign (or multiple call signs, all of which are unavailable except the desired one) in order to maximize his or her random selection chances of having one of those applications with the desired call sign selected as against other potential filers, the Commission must

dedicate substantial resources to processing those applications and refunding dozens of tendered fee payments.

19. This manipulative practice clearly should be discouraged. While it is unclear to ARRL why this practice has not been prohibited by Order, it should be prohibited now. Repetitive or inconsistent filings are prohibited in most radio services now.<sup>6</sup> The sanction for violation of the multiple application provision should be the dismissal of all simultaneously pending applications for one single call sign by the same applicant, and, if *post hoc*, the rescission of the call sign applied for in multiple applications. ARRL would, however, note that the Commission's proposed rule change in Section 97.19 would not solve the problem discussed in the Notice. A filer could choose to include an unavailable, or already assigned choice as its first choice on multiple applications. Under the Commission's proposed wording, the second choice on multiple applications can be the repetitive call sign without violating the rule. The proposed rule only speaks to the first choice call sign being repetitive and subject to dismissal. What the Commission should preclude is the filing of more than one application, on a single day, for a given applicant type (individual versus club) for the same call sign choice(s). The sanction for violation should be the dismissal of all applications where the same call sign choice appears on more than one application filed on a single day, for a single application type.

#### **IX. Amateur Operation in the 902-928 MHz Band**

20. The Notice, at paragraphs 67 and 68, briefly addresses ARRL's proposal to incorporate the terms of a previously granted waiver in the Rules, so as to relieve operating restrictions on Amateur stations in certain areas of Colorado and Wyoming.

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<sup>6</sup> Section 1.937 pertains to Wireless Services Applications. It does not specifically prohibit multiple filing of applications, but does address repetitive filings once an application has been adjudicated.



The Rules, at Section 97.303(g)(1), prohibit operation in this band. The Commission partially waived that restriction in 1990 by *Order*, 5 FCC Rcd. 3041 (1990).

Incorporation of the terms of the waiver would make them known to radio amateurs, and would essentially update Section 97.303(g)(1). The Commission proposes to do this, and it is clearly in the public interest to do so. ARRL urges that this proposal be finalized.

## **X. Space Station Launch Notification**

21. The Commission, at paragraphs 73 through 75 of the Notice, proposes a variation of a request in RM-10621 filed by AMSAT, the Radio Amateur Satellite Corporation, for relief from the Commissions Rules regarding pre-space notifications for manned and unmanned spacecraft. Specifically, the AMSAT Petition sought to permit the licensee of each space station to file a single written pre-space notification (information document) within 30 days after receiving a launch commitment.<sup>7</sup> Section 97.207(g) of the Commission's Rules currently requires two pre-space notification filings. The first notification is now required to be submitted to the Commission 27 months before initiating space station transmissions. A second filing is due five months prior (regardless of whether the information furnished changed in the meantime). AMSAT claimed that the current 27-month pre-space notification requirement has been an unnecessary burden for both amateur radio operators and the Commission, and should be amended to reflect the practical realities of obtaining launch opportunities in the Amateur Satellite Service.

22. The Commission was not satisfied that the timetable for the proposed single pre-space notification, 30 days after receiving a launch commitment for an Amateur Radio satellite payload, is sufficiently long to permit Commission review of the proposal.

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<sup>7</sup> The AMSAT proposal would also require licensees to provide a replacement pre-space information document with the International Bureau prior to launch in the event any of the information contained in the notification changes prior to launch.

Instead, the Commission proposes to use the date that the space station launch vehicle is determined and the date the integration of the space station into that launch vehicle occurs as dates for determining when notification is submitted. As proposed by the Commission, the single notification would occur within 30 days after the launch vehicle is determined, but not later than 90 days before the space station is integrated into the launch vehicle. The latter time period is potentially difficult in some circumstances.

23. ARRL supports the AMSAT proposal, to the extent that information to be filed with the Commission should be required to be filed within 30 days after obtaining a launch commitment, in lieu of the fixed 27-month advance notice. The Commission's proposed substitute would have some application to unmanned spacecraft, but manned space missions involving Amateur Radio are not particularly flexible in their timing. The Commission does not routinely concern itself with whether or not NASA astronauts are or are not carrying Amateur Radio equipment. ARRL has had some experience with the practical difficulties involved. During the Space Shuttle experiments with Amateur Radio (SAREX), NASA astronauts were routinely licensed Amateurs, and actively participated in contacts with school children from the Space Shuttles while in orbit. This is an extremely beneficial activity for all involved, and an incomparable educational experience for the students. These activities continue with school contacts from the International Space Station (ISS). However, the SAREX operations were unpredictable, to the extent that it was often unclear whether SAREX operation would be conducted or not in connection with any particular flight. None could have been subject to a 27-month advance notification requirement, or, sometimes, even a 90-day requirement. The situation is worse still with unmanned Amateur Satellite (OSCAR) operations. Launch

opportunities are few and far between, and are often not known until shortly before the launch occurs.

24. Because finding an affordable launch opportunity is difficult and last-minute decisions at a launch site may determine whether or not an Amateur satellite will be allowed to “piggyback” onto a commercial satellite, a ninety-day advance notice requirement prior to integration of the Amateur satellite into the launch vehicle imposes a compliance burden which, though far better than the 27-month requirement, which is impossible of compliance, is still practically difficult. AMSAT must seek a waiver of the requirement for essentially every launch. If the ninety-day period could be shortened to even sixty days, the burden would be lessened. In any case, the Commission’s proposed revisions to Section 97.207(g) offer a more flexible, and thus practical, window of time in which to notify the Commission of all required information prior to launch than do the current rules.

25. The Commission should configure the rule to obviate the need for waivers of its requirements. The constant necessity of rule waivers actually undermines the original purpose of creating rules for the Service in the first place. In 1980, the Commission issued a *Report and Order* in Docket 19852, 47 RR 2d 1500, *et seq.*, (1980) adopting rules to provide for Amateur Satellite Service. The rules were “needed to obviate requests for waivers of rules developed to regulate terrestrial radio communications”... and to “regularize amateur radio space operations which... have been authorized on an ad hoc basis by rule waivers” (47 RR 2d at 1500). The fact that the current rule is impossible of compliance, and necessitates waivers each time, shows that the Commission’s purpose in enacting the rules has been frustrated. The changes that are proposed are a big step in the

right direction, but they should be configured so as to eliminate the necessity of rule waivers going forward. In ARRL's opinion, the ninety-day advance notice requirement relative to integration of the payload into the launch vehicle is, in some contexts, too long still. If the International Bureau requires more than thirty days' advance notice to review notifications, then perhaps a sixty-day notification period could be enacted. This might still avoid the need for waivers in most cases, and provide a longer period for IB review of pre-space notifications.

26. Finally on this topic, ARRL would suggest that the Commission not enact any rules regarding orbital debris separate from those currently under consideration for all satellite services in a separate docket proceeding (IB Docket 02-34, 17 FCC Rcd. 5586). That proceeding contains the proper record for any action regarding orbital debris. If the Commission should receive a notice of intent to commence space operation and is dissatisfied with the orbital debris mitigation plan (if any is required for Amateur Radio stations) it would take the actions to be determined in that proceeding, when resolved. It is premature to speculate on the outcome of the Docket 02-34 proceeding and no action should be taken with respect to Part 97, pending final outcome of the broader docket proceeding.

## **XI. Commission Proposals**

27. The Commission, beginning at paragraph 83 of the Notice, proposes various rule changes on its own motion. ARRL's comments on each of these follow.

28. First, the Commission proposes to revise Section 97.115 of the Rules to add to the existing list of individuals who are not eligible to operate Amateur Radio stations as third parties, those former licensees whose licenses were not renewed after an

administrative hearing, and to clarify that only a station transmitting a RTTY or data emission may be automatically controlled while transmitting third-party communications. ARRL agrees with both proposals. The first is self-explanatory. The rules currently prohibit individuals whose licenses were revoked from being third parties. The non-renewal of an Amateur license after a hearing is justified for the same reasons and eliminates a loophole in the regulations which should not exist. Automatically controlled third party communications should be limited as well.

29. The Commission proposes to amend Sections 97.315 and 97.317 to allow manufacturers to market RF power amplifiers in the United States that are capable of operation between 24 and 35 MHz, and to delete the 50-watt minimum drive power requirement for amateur radio amplifiers. The equipment authorization requirement for such amplifiers would remain, and the Commission is content to rely on Section 95.411 of the Commission's rules, which prohibits Citizen's Radio Service stations from attaching an external RF power amplifier or any device capable of amplifying the signal of a CB transceiver. The Commission also proposes to delete Section 97.3(a)(19) of the rules, which is the definition of an external RF power amplifier kit. This definition has always been difficult conceptually, as any collection of parts might be deemed a "kit", even if the purpose of the collection of parts was for a different device entirely, and even if it required additional parts to comprise a sufficient assembly to construct a power amplifier.

30. ARRL is most appreciative of the Commission's sensitivity to a problem which has plagued the Amateur Service since 1978. The Commission enacted the rules that the Commission now proposes to delete at that time exclusively and admittedly in

order to address abuses in the Citizen's Radio Service. The use of CB radios was at an all-time high at that point, and the abuses of the Commission's Rules, by CB users attaching Amateur Radio amplifiers to 27 MHz CB radios, were epidemic. However, the rules could have and should have been far more narrowly crafted at the time in order to address the CB violations without imposing such substantial burdens on the innocent Amateur Radio operators. The proposed amendments are welcome and will enhance Amateur use of the 10 meter and 12 meter Amateur bands. It will also allow radio amateurs to enjoy the benefits of construction projects without unnecessary restrictions. Amateur radio RF power amplifiers will still require equipment authorization, which remains necessary, but the equipment, once authorized, can be used without modification by licensed radio amateurs on all allocations. These proposals are heartily supported and should be implemented as soon as possible.

31. The Commission proposes at paragraph 87 of the Notice to delete certain requirements limiting the scope of relief actions to disaster situations when normal communication systems are overloaded, damaged or disrupted. Section 97.111(a) would be amended to clarify that an Amateur station may at all times and on all frequencies authorized to the control operator make transmissions necessary to meet essential communications needs and facilitate relief actions. This change is beneficial, and describes what actually occurs in relief actions. Restrictions on emergency assistance provided by radio amateurs is antithetical to the basis and purpose of the Service and raises questions that might discourage served agencies from making good use of Amateur Radio in emergencies. This change obviates much of Section 97.401, and the Commission proposes to eliminate Subsections 97.401(a) and (c), dealing with disaster

communications and the priority to be accorded such. ARRL is in agreement with these deregulatory changes.

32. As to the Alaska Emergency Frequency, 5.1675 MHz, the Commission proposes to allow training drills and tests on this channel, not now permitted. This is also an important deregulatory change, since the use of the frequency in Alaska is less valuable unless radio amateurs are prepared for its use in emergencies. The Amateur Service conducts serious, and extremely professional emergency drills and tests, and this new authority will be of great value to the citizens of Alaska.

33. At paragraphs 89 and 90 of the Notice, the Commission proposes to delete from Section 97.407 of the Rules the list of RACES frequencies that can be used. The current rule specifies such frequencies, but it does not indicate that RACES and other operation during certain emergencies and in wartime is regulated under other provisions of the Commission's rules, including Part 214 of the Rules. Because the Director, Office of Science and Technology Policy (OSTP) in the Executive Branch has authority over RACES operation in terms of frequencies to be used, the specification of RACES bands in Section 97.407(b) is unnecessary and duplicative. ARRL agrees that the specification of RACES frequencies is unnecessary, provided that the rule is amended, as proposed, to cross-reference Part 214 of the Commission's Rules.

34. The Commission next proposes a series of changes to the rules governing the Volunteer Examiner program. First, the Commission proposes to eliminate Section 97.509(a) of the rules, which requires a public announcement of test locations and times. The Commission believes that test opportunities and times are given adequate coverage on club and VEC websites, newsletters, and other media. ARRL disagrees. The purpose

of the public notice requirement is to preclude “private”, unannounced examination sessions as a means of preventing abuses. There is no evidence that this requirement is a burden, and the examples cited of adequate coverage of examination opportunities is sufficient evidence that compliance with this rule is not at all burdensome. ARRL suggests that the rule be retained, in order to preclude abuses of the VE system. The requirement also assists in allowing newcomers to become aware of examination opportunities easily.

35. The Commission proposes to delete from Sections 97.509(m) and 97.519(b) the mandatory ten-day time during which VEs and VECs must submit or forward applications. These rules applied, the Notice states, to paper applications and were adopted when paper applications were used exclusively. Electronic processing and filing methods have largely eliminated substantial delay in processing and filing applications for examination candidates. ARRL suggests that this provision should be retained. ARRL, the largest VEC, still requires its VE teams to send hard copy documents to the ARRL-VEC before the examination session will be coordinated. This is to allow the VEC to detect and report abuses in the examination process to the Commission. It is a procedure that works, and has been shown to work, repeatedly, in detecting abuses. Without the ten-day rule applicable to VEs, the only incentive that the VE teams have to promptly release examination materials to the VECs is VEC policy, which is often not sufficient. By having the rule in place, the ARRL-VEC can impress on the VE teams that they are in violation of FCC rules by taking more than ten days to remit the documents to the VEC. It would be substantially unfair to an examinee to become the victim of a dilatory VE team without providing to the VEC a remedy to compel the release of the



documents to the VEC for processing. Therefore, ARRL requests that the ten-day rule be retained.

## **XII. WRC-03 Implementation Issues**

36. There are two items not otherwise addressed in this proceeding which could be easily handled as an administrative matter in any Report and Order adopted in this proceeding. Both constitute domestic implementation in the Part 97 rules of changes in the International Radio Regulations. The first pertains to Section 97.117 of the Rules, dealing with “International Communications.” The second deals with provisions for third party communications under Section 97.115(a)(2).

37. The current text of Section 97.117 was taken from the International Radio Regulations as they read prior to WRC-03. It states simply that “[t]ransmissions to a different country, where permitted, shall be made in plain language and shall be limited to messages of a technical nature relating to tests, and to remarks of a personal character for which, by reason of their unimportance, recourse to the public telecommunication service is not justified.” This provision was revised and modernized substantially in the new Article 25 of the Radio Regulations at WRC-03. Two sections of the Radio Regulations, 25.2 and 25.2A, contain the replacement language. They read as follows:

25.2 §2 Transmissions between amateur stations of different countries shall be limited to communications incidental to the purposes of the amateur service, as defined in No. 1.56 and to remarks of a personal character.

25.2A Transmissions between amateur stations of different countries shall not be encoded for the purpose of obscuring their meaning, except for control signals exchanged between earth command stations and space stations in the amateur-satellite service.

These changes can easily be implemented by replacing the current text of Section 97.117 with language from the foregoing. The reference to “No. 1.56” is the definition of the Amateur Service in Section 97.3(a)(4), which would be substituted in the revised Section 97.117 language. A proposed appendix is attached hereto which is recommended by ARRL for adoption by the Commission as an administrative matter in this proceeding.

38. The other domestic implementation in the United States from the changes to the Radio Regulations occurring at WRC-03 relates to Section 97.115(a)(2) of the Rules. That rule section generally prohibits international third party communications unless specifically permitted. This presumption was reversed in the Radio Regulations at WRC-03. Article 25 now reads, in relevant part, as follows:

25.3 2) Amateur stations may be used for transmitting international communications on behalf of third parties only in case of emergencies or disaster relief. An administration may determine the applicability of this provision to amateur stations under its jurisdiction.

It is important to recognize that this regulation changes the default condition for international third party communication. Previously, and since 1932, communications on behalf of third parties were expressly prohibited in the absence of a special arrangement between the countries concerned. Now, in the absence of a domestic regulation prohibiting it, international third party communication in case of emergencies or disaster relief is expressly permitted. Since the current Section 97.115(a)(2) sets forth the old presumption, the flexibility of the Radio Regulations requires domestic implementation. The same, per the attached proposed Appendix, is requested in a Report and Order adopted in this proceeding.

### **XIII. Conclusions**

39. ARRL congratulates the Commission for an exceptionally good effort to deregulate, streamline and update certain Part 97 rules. This proceeding, though not a comprehensive restructuring of Amateur operating privileges, is nevertheless a useful and timely exercise. The rule changes proposed herein will, in the main, substantially benefit and modernize Amateur Radio and contribute to its ongoing advancements. This proceeding, and the 1999 License Structure Decision, set the stage well for early consideration of the ARRL's comprehensive proposal for restructuring of Amateur Radio licensing and operating privileges, RM-10867, in light of actions taken at WRC-03, which ARRL anticipates will be reviewed this Fall.

40. In the meantime, ARRL recommends that the Commission proceed with its proposals in the Notice, except as otherwise discussed in these Comments, and accept the gratitude of the more than 680,000 licensees of the Commission in the Amateur Service for a good, thoughtful and wide-ranging series of proposals, most of which will enhance the Amateur Radio Service substantially.

Therefore, the foregoing considered, ARRL, the National Association for

Amateur Radio, respectfully requests that the Commission adopt the proposals as specified herein; to modify those as suggested herein.

Respectfully submitted,

**ARRL, THE NATIONAL ASSOCIATION  
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## APPENDIX

Section 97.115(a)(2) would be amended to read as follows:

### **97.115 Third Party Communications.**

(a) An amateur station may transmit messages for a third party to:

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(2) Any station within the jurisdiction of any foreign government in case of emergencies or disaster relief. No station shall transmit messages for a third party to any station within the jurisdiction of any foreign government whose administration has prohibited amateur stations from transmitting international communications on behalf of third parties.

Section 97.117 would be deleted in its entirety, and a new Section 97.117 would be adopted , to read as follows:

**97.117. International Communications.** Transmissions between amateur stations of different countries shall be limited to communications incidental to the purposes of the amateur service, as defined in §97.3(a)(4) and to remarks of a personal character. Such transmissions shall not be encoded for the purpose of obscuring their meaning, except for control signals exchanged between earth command stations and space stations in the amateur-satellite service.